**Homework 82** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Special Quadrilateral Properties** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Failure to show all work and write in complete sentences will result in LaSalle!**

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| 1) The area of a trapezoid is 55 square inches. The length of the shorter base is 10 inches and the height is 5 inches.   1. Draw a diagram. 2. Write the formula for the area of a trapezoid. 3. What is the length of the other base? | 2)    a. Solve for the unknown base.  b. Check that your answer is correct with “proof” from the formula for the area of a trapezoid. |
| 3) In the parallelogram below, a diagonal is shown and 2 measures 63 and 6 measures 42 What is the m4?    6  5 | 4) In the trapezoid ABCD shown below, side lengths AB and DC are parallel, DAC = 72, D = 90, and B = 109. What is the measure of BCA?  A  B  C  D |
| 5) The parallel sides of the isosceles trapezoid shown below are 12 feet long and 20 feet long, respectively. What is the distance, in feet, between these two sides?  12  5  20 | 6) |